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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
NGUYEN, HAI V	

ART UNIT	PAPER NUMBER
2142	8

DATE MAILED: 10/18/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/311,952	Applicant(s) MURAYAMA ET AL.	
	Examiner Hai V. Nguyen	Art Unit 2142	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 July 2002* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *88-103* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *88-103* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

1. This Action is in response to the communication received on 08 July 2002.

2. Claims 88-103 are presented for examination.

Response to Arguments

3. Applicant's arguments and amendments filed on 16 November 2001 have been fully considered but they are not deemed fully persuasive. Applicant's arguments are deemed moot in view of the following new ground(s) of rejection as explained here below, necessitated by Applicant's substantial amendment (i.e., a processor for issuing a request to said plurality of shared memory devices *for requesting access to one of said shared memory devices;* a memory request processing section for processing said request *issued* to said plurality of shared memory devices, wherein said memory request processing section processes said request to the shared memory device connected to said computer *if said request requests access to the shared memory device connected to said computer*, and sends said request to another computer *to access the* shared memory device connected to said another computer *if said request requests access to the shared memory device connected to said another computer.)* to the claims which significantly affected the scope thereof.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 88-103 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Akizawa** et al. patent no. **5,548,724** in view of **Choquier** et al. patent no. **5,774,668**.

6. As to claim 88, Akizawa discloses in a computer system having a plurality of computers connected to each other (Fig. 1, 100, 110, 120, 130) and a plurality of shared memory devices (Fig. 1, 700, 710, 720, 730), each of said plurality of shared memory devices being coupled to one of said plurality of computers, each of said plurality of computers comprising:

a processor for issuing a request to said plurality of shared memory devices for requesting access to one of said shared memory devices (issuing a file access request to the file access control means of its own file server when the selected file server is its own server, (col. 3, lines 1-26) ...a file storage device identifying program 603 for delivering information on the file storage device to the file storage device access program 604 when access is made to the file storage means 700 for which its own processor 101 takes charge of access control, col. 5, lines 4-35); However, Akizawa does not explicitly discloses a memory request processing section for processing said request issued to said plurality of shared memory devices, wherein said memory request processing section processes said request to the shared memory device connected to said computer if said request requests access to the shared memory

device connected to said computer, and sends said request to another computer to access the shared memory device connected to said another computer if said request requests access to the shared memory device connected to said another computer. Thus, the artisan would have been motivated to look to the related networking art for potential system for implementing the processing of the access requests to the shared memory devices connected to the computers.

In the same field of endeavor, Choquier, related System For On-line Service In Which Gateway Computer Uses Service Map Which Includes Loading Condition Of Servers Broadcasted By Application Servers For Load Balancing, discloses the Gateway computers identify the applications servers in the service groups and determine the loads of the application servers by accessing a locally-stored service map. The service map contains information about every applications server of the system (Choquier, col. 1, lines 40-67; col. 2, lines 14-67; col. 3, lines 1-52) and a transport protocol that handles client-Gateway communications over the Local Area Network multiplexes client-server message streams to permit end users to access multiple services simultaneously... Allocation of application servers to service groups can be performed semi-automatically by a system operator who monitors service loads from a system console, or automatically using a load monitoring program that compares service loads to predetermined thresholds (Choquier, col. 3, lines 9-52) and the Gateways 126 could be programmed to pass each "open" request to one of the application servers 120 within the service group, and the recipient server could apply the load balancing method and (if necessary) reroute the request (Choquier, col. 15,

lines 51-64) and all service DLLs for all on-line services are stored on the hard disk of all servers 120 of the system so that any service can be automatically activated on any server 120 at any time (Choquier, col. 17, lines 1-37).

Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention made to have incorporated Choquier's teachings of load balancing to the application servers to process the access requests for accessing to the services on the application servers of the system (col. 2, lines 28-32) with the teachings of Akizawa, for the purpose of balancing the loads on the application servers in order to accommodate efficiently the usage levels of specific on-line services (Choquier, col. 1, lines 40-63). Choquier also suggests that the transport mechanism allows the end users to simultaneously access multiple on-line servers and service applications to be updated without temporarily taking the services off-line (Choquier, col. 1, lines 40-63). Akizawa also suggests that the present invention providing a file access control method and a unit thereof capable of preventing generation of a bottleneck due to concentration of access to a specific file server and lowering of the throughput attendant thereupon even when a plurality of client computers make access to the same directory or file in a network where a plurality of file servers are connected in parallel for sharing a file among a plurality of client computers (Akizawa, col. 2, lines 1-67; col. 2, lines 1-41).

7. As to claim 89, Akizawa-Choquier discloses wherein said memory request processing section further comprises:

a memory for storing structural definition information which describes a structure of said computer system (Akizawa, Fig. 3, box 510, File attribute table, Load attribute table); and

a request judging section for judging which shared memory device is requested by said request according to said structural definition information (Akizawa, Fig. 3, box 603)).

8. As to claim 90, Akizawa-Choquier discloses wherein said memory request processing section further comprises: a request acceptance section for checking whether the sender of said request has access right to a shared memory device to which access is requested according to said structure definition information, wherein said structure definition information includes a password to allow access to said shared memory device to which access is requested (Choquier discloses that during a typical session, a client will maintain a communication link with a Single Gateway 126, but may access multiple services (and thus communicate with multiple servers 120)...each time the user opens a service, the Gateway 126 that is handling the logon session accesses a locally-stored service map 136 to select a server 120 that is allocated to the particular service, and then establishes a service instance channel with the selected server 120... (Choquier, col. 7, lines 64-67; col. 8, lines 1-63).

9. As to claim 91, Akizawa-Choquier discloses wherein said structural definition information includes information indicating a correspondence between each of said plurality of shared memory devices and a plurality of identifiers (Akizawa, Figs. 5, 6).

10. As to claim 92, Akizawa-Choquier discloses wherein said memory request processing section comprises:

a remote processing request section for issuing a remote request to said another computer to access said shared memory device connected to said another computer (Fig. 14, box 301 remote file access processing program; col. 3, lines 20-26; col. 9, lines 49-59).

11. Claims 93-94, 96, 98-99 have similar limitations as claims 88-89, 89, 91-92; therefore, they are rejected under the same rationale.

12. Claims 95, 97 have similar limitations as claim 90; therefore, they are rejected under the same rationale.

13. As to claims 100, Akizawa-Choquier discloses a computer program executed by computer for controlling access to the plurality of shared disks to be accessed as in the system of claim 1 above.

The Examiner takes **Official Notice (see MPEP 2144.03)** that it is well known in the networking art to utilize a computer-readable memory containing computer readable instructions for the storing and execution of the method and system in order to perform the functional procedures for controlling access to the shared disks connected to the computers (i.e., floppy disks, CD-ROM, hard disk, etc.).

Therefore, it would have been obvious to one of ordinary skill in the data processing art at the time the invention was made to have included the use of a computer-readable memory containing computer readable instructions to store and execute the procedures of controlling access to the shared disks connected to the

computers because use of storage medium for programs used in general purpose computer to execute special purpose functions was routine in the art.

14. Claims 101-103 are substantially the same as claims 89, 91-92 and are thus rejected for the reason similar to those in rejection claims 89, 91-92.

Response to Arguments

15. Applicant's arguments include the failure of the previously applied art to expressly discloses

"issuing a file access request to the file access control means of its own file server when the selected file server is its own server, (col. 3, lines 1-26) ...a file storage device identifying program 603 for delivering information on the file storage device to the file storage device access program 604 when access is made to the file storage means 700 for which its own processor 101 takes charge of access control (col. 5, lines 4-35)" as well as the present invention of Applicant having "a processor for issuing a request to said plurality of shared memory devices for requesting access to one of said shared memory devices" [see Applicant's response, Paper 6, page 10, 4th paragraph]; and

"Gateway computers identify the applications servers in the service groups and determine the loads of the application servers by accessing a locally-stored service map. The service map contains information about every applications server of the system (Choquier, col. 1, lines 40-67; col. 2, lines 14-67; col. 3, lines 1-52) ... a transport protocol that handles client-Gateway communications over the Local Area Network multiplexes client-server message streams to permit end users to access

multiple services simultaneously... Allocation of application servers to service groups can be performed semi-automatically by a system operator who monitors service loads from a system console, or automatically using a load monitoring program that compares service loads to predetermined thresholds (Choquier, col. 3, lines 9-52) and the Gateways 126 could be programmed to pass each "open" request to one of the application servers 120 within the service group, and the recipient server could apply the load balancing method and (if necessary) reroute the request (Choquier, col. 15, lines 51-64)" as well as the present invention of Applicant having "a memory request processing section for processing said request issued to said plurality of shared memory devices, wherein said memory request processing section processes said request to the shared memory device connected to said computer if said request requests access to the shared memory device connected to said computer, and sends said request to another computer to access the shared memory device connected to said another computer if said request requests access to the shared memory device connected to said another computer." [see Applicant's response, Paper 6, page 10, 5th paragraph].

It is evident from the detailed mappings found in the above rejection that Akizawa-Choquier, clearly disclose this functionality. Further, it is clear from numerous teachings (previously and currently cited) that the provision for issuing request for accessing to the shared memory devices widely implemented. Thus, Applicant's arguments drawn toward distinction of the claimed invention and the prior art teachings on this point are not persuasive.

Conclusion

16. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai V. Nguyen whose telephone number is 703-306-0276. The examiner can normally be reached on 7:00-3:30 Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart can be reached on 703-305-4815. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-7239. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3230.

Any response to this final action should be mailed to:

Box AF

Commissioner of Patents and Trademarks

Washington, D.C. 20131

or faxed to:

(703) 746-7239, (for **formal communications**; please mark "EXPEDITE PROCEDURE").

or:

(703) 746-7240 (for **informal or draft communications**, please label "PROPOSED " or "DRAFT").

Or:

(703) 746-7238 (for After Final communications).

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

KENNETH R. COULTER
PRIMARY EXAMINER

Hai V. Nguyen
Examiner
Art Unit 2142

HN